

## **ABSTRACT**

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A circuit, apparatus and method for providing a cross-coupled load with  
5 built-in current mirrors are provided in embodiments of the present invention. In  
an embodiment of the present invention, a circuit comprises a first node for  
providing a first variable voltage and a second node for providing a second  
variable voltage. In an embodiment of the present invention, a clock signal  
generates the first variable and second variable voltages. A first transistor is  
10 coupled to the first node and provides a first current responsive to a first control  
voltage being applied to the first transistor gate. A second transistor is coupled to  
the second node and provides a second current responsive to a second control  
voltage being applied to the second transistor gate. The first and second  
transistors operate in a saturation region. A first control circuit is coupled to the  
15 first transistor gate and the second node. The first control circuit provides the first  
control voltage responsive to the first variable voltage. A second control circuit is  
coupled to the second transistor gate and the first node. The second control  
circuit provides the second control voltage responsive to the second variable  
voltage. In an embodiment of the present invention, the first and second currents  
20 are used to provide a duty cycle correction signal.